

## REMARKS

Claims 1-2 and 4-46 remain in the application. Claims 1, 10, 36-37 and 42-46 have been amended. Claim 3 has been canceled.

### **Patent Office Rejection of Claims 1-9 under 35 USC 103 on the basis of Bohlman in view of Ying**

The Examiner indicates that each of the cited claims is unpatentable over Bohlman, and in some instances, Bohlman in view of Ying. Specific reasoning is given in the rejection of each of these claims. Regarding the specific rejection of Claim 3, the Examiner indicates that:

Claim 3 adds into claim 1 "said imaginary line drawn through said feed points corresponding to said first antenna is orthogonal to said imaginary line drawn through said feed points corresponding to said second antenna" (Bohlman, the imaginary lines through feed points of the antennas 14 and 20 shown in figure 1 are orthogonal; Bohlman, column 6, line 41 to column 7, line 57).

### **Applicants' Response to the Rejections under 35 USC 103**

Applicants traverse the rejection of Claim 3 based upon Bohlman. Claim 1 has been amended to include all of the features of dependent claim 3. Original claim 3 has been canceled. No other changes have been made to these claims.

In amended claim 1, as in original claim 3, an antenna apparatus is described that has two spiral antennas in which an imaginary line drawn through the feed points corresponding to a first of the antennas is orthogonal to an imaginary line drawn through the feed points corresponding to the second of the antennas.

Applicants have closely inspected the cited embodiment of Bohlman illustrated in figure 1 of U.S. Patent 5,227,807 (Bohlman) and do not find that an imaginary line drawn through the

feed points shown are mutually perpendicular (orthogonal) to each other, as Applicants have claimed in amended Claim 1.

The text of Bohlman cited by the Examiner does not describe (or suggest) this condition.

The technical advantages of such an arrangement are described in Applicants' specification at least at page 7, lines 11-16.

Because of the lack of teaching in Bohlman of orienting two spiral antennas such that an imaginary line drawn through the feed points of a first of the antennas is orthogonal to an imaginary line drawn through the feed points of the second of the antennas, Applicants consider that a prima facie case of obviousness of the invention as now described in amended claim 1 has not been made.

Accordingly, Applicants respectfully request that the 35 USC 103 rejection of claim 3 as now amended claim 1 be withdrawn.

Claim 3 has been canceled and claims 2 and 4-9 are now dependent upon amended claim 1. Allowance of these claims is earnestly requested.

#### **Allowable Subject Matter**

Claim 10 and its dependent claims 11-20 are objected to as being dependent upon a rejected base claim but are considered allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

Claims 21-46 are allowed.

#### **Applicant's Response to Allowable Subject Matter**

Claim 10 has been amended as suggested by the Examiner. Accordingly claims 10-20 should be in condition for allowance.

**Serial No. 09/295,958; Navy Case No. 79628**

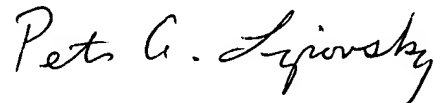
Applicants have amended claims 36-37 and 42-46 wherein these claims inadvertently referred to the "apparatus" of the claim from which they depend, rather than to the "method" from which they depend. The amendments to these claims changes these claims from their dependency upon an apparatus to a dependency upon a method. No other changes to the cited claims have been made.

Accordingly, all remaining claims of the application should now be in condition for allowance. A Notice of Allowance is respectfully requested.

Any inquiry concerning this case should be directed to Applicants' attorney, Mr. Peter Lipovsky at (619) 553-3824.

Respectfully submitted,

by

A handwritten signature in black ink that reads "Peter A. Lipovsky". The signature is written in a cursive, flowing style.

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12 August 2005  
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